

METHOD AND SYSTEM FOR MULTIPLE PASS VIDEO CODING

ABSTRACT OF THE DISCLOSURE

A real-time MPEG video coding system with information look-ahead for constant bit rate (CBR) applications, such as, for example, Video-on-Demand (VoD) over ADSL. This scheme employs two MPEG encoders. The second encoder has a buffer to delay the input by an amount of time relative to the first encoder to create a look-ahead window. In encoding, the first encoder collects the information of statistics and rate-quality characteristics. An on-line information processor then uses the collected information to derive the best coding strategy for the second encoder to encode the incoming frames in the look-ahead window. The second encoder uses the encoding parameters from the processor as the coding guide to execute the coding strategy and generate the final bitstream.